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WAGES.

THE circumstances which determine the rate of wages amongst hired operatives have been inquired into, with great anxiety for correct results, by three modern political economists, Ricardo, Malthus, and McCulloch; and it is generally allowed that the principles which operate on this great branch of our social economy have been nearly, if not fully, ascertained by these gentlemen. We propose, in the present place, to give a simplified view of their doctrines, the diffusion of which amongst the labouring classes must have as yet been very imperfect, although there are few which bear more pressingly on their interests.

Upon the supposition of a system of things, in which men, as employers and employed, compete with each other, instead of co-operating in a great social system, as proposed by Mr Owen; upon the supposition of this system, we have necessarily to understand the existence of two things—labour and capital. Labour is what adapts the works and productions of nature to human needs; capital is an accumulation of the results of labour beyond what has been required for immediate use. Capital, therefore, consists of that part of the value of land which has been given to it by labour, of the stored produce of the land, of buildings, instruments, machinery, manufactured goods, clothes, and all other needful and useful things which possess what is called exchangeable value, and can be made directly available, either to the support of human existence, or to the facilitating of production. All these things are possessed by individuals as property: they belong either to the individuals who have made or produced them, or to the representatives of those individuals. And the great use of capital is its enabling men to set about other labours, seeing that it supports them while the fresh tasks are going forward. Few are without something which may be called capital; the working man who has a spade or hook of his own, or a week's free wages, may be said to possess capital. This class, however, have upon the whole a comparatively small amount of capital. Such amounts of this wealth as serve to employ labourers in certain tasks, are possessed by only a few, forming the class called masters or employers. Yet, in a country where labour is free, every one has his own chance, by saving, to become a capitalist and employer; and practically, in our country, we find that a great proportion of the master manufacturers were once working men, or are the sons of men who have been so.

Labour, being free, is a marketable article. The man, able and willing to work, comes forward for the purpose of finding employment, upon the rewards of which he may live. Certain special circumstances may affect his case, as the difficulty or nicety of the work he can perform, its agreeableness or disagreeableness; but these do not now call for attention. Our object is to explain the circumstances which affect the remuneration of labour in general. It has been laid down, then, that the rate of wages depends on the amount of that portion of capital appropriated to the payment of wages, compared with the number of labourers. This portion of capital consists of food, clothes, and other articles required for the use and consumption of labourers. The money put into the workman's hand is but something representing a certain quantity of those articles which falls to his share. It is not the quantity of money he receives, but the quantity of necessities and conveniences for which that money will exchange, that is to be considered as really forming his wages.

The rate of a working man's returns is thus liable to be affected by various contingencies. It may decline in consequence of the capital distributable in reward

of labour being diminished, while the labourers have remained equally numerous; or by the number of labourers increasing, while the capital has remained the same; or by the capital decreasing and the number of labourers increasing simultaneously. Or it may rise in consequence of all these circumstances reversed. On the other hand, if capital and labourers increase or decrease at the same rate, wages will not be changed. No change ever takes place through any other means than a disturbance of the proportion between the fund of food, clothing, &c., at the command of labourers, and the number of the labourers. Mr McCulloch illustrates the principle by supposing that this fund, in any given country, were reduced to the standard of wheat, and that it formed a store of 10,000,000 of quarters. If the labourers in that country were 2,000,000 in number, each would have five quarters, supposing all to be reduced to one level. The economist asks how it is possible that each could have more than five quarters, if the store were 100,000 quarters less, or the labourers 100,000 more. In these cases, the share of each, that is, his wages, would inevitably be less. "The well-being and comfort of the labouring classes are, therefore," says Mr McCulloch, "especially dependent on the relation which their increase bears to the increase of the capital that is to feed and employ them. If they increase faster than capital, their wages will be reduced; and if they increase slower, they will be augmented. In fact, there are no means whatever, by which the command of the labouring class over the necessities and conveniences of life can be enlarged, other than by accelerating the increase of capital as compared with population, or by retarding the increase of population as compared with capital; and every scheme for improving the condition of the labourer which is not based on this principle, or which has not an increase of the ratio of capital to population for its object, must be completely nugatory and ineffectual."

The doctrine is amply illustrated by circumstances in the condition of our own and surrounding countries. In America, an active and intelligent people cultivate a fine soil of practically unlimited extent to the best advantage: thus the capital destined for the support of labourers rapidly increases. Population also increases rapidly, doubling itself every twenty-five years, but not so rapidly as that department of capital; and hence wages are high, and the working man's command of necessities great. In Ireland the population has nearly quadrupled in about a century, while the fund for the support of labour has not increased in proportion; hence wages are at only fourpence, sixpence, and eightpence a-day in Ireland, and employment is often not to be had for months. In England the inhabitants have only doubled in a century, while wealth has greatly increased, and the proportion of food to the labourers has probably experienced some improvement, considering all classes of them together. The nature of the soil, the domestic feelings of a people, and the possibility of spreading out, are circumstances of great importance. The soil of America is such as to provide very quickly and largely for its labourers; it is also of vast extent, and much remains unsettled. On the other hand, in Ireland the soil is limited, capital is scarce, and there is at the same time, from the habits of the people, a tendency to very rapid increase of numbers. It may chance that the most fecund nation is not placed on the less bounded field, or the best soil; or there may be circumstances in the condition of this nation, tending to prevent capital from increasing; in which case the evil of low wages may be considered as almost irremediable amongst that people. To be placed on such

a territory as America, with only a moderate tendency to increase in numbers, may be considered as good fortune in a nation. We need scarcely remark, that an unlimited power to manufacture, and to exchange the manufactures beyond the bounds of the state, for food raised there, is exactly equivalent, in its effects, to an unlimited soil within the state.

The check which is given to population in any country, when the capital proves insufficient to support the people in the way they have been accustomed to, gives rise to a subordinate doctrine as to what is called the *natural or necessary rate of wages*. The rewards of labour, it is assumed, must be such as to allow of the supply of labourers being kept up, and of their being maintained in a proper manner. Every people has different notions of what is necessary for subsistence, or experiences different positive necessities, some feeding chiefly on wheat, and some chiefly on potatoes; but whenever the supply of the food, whatever it may be, falls below a sufficiency, the supply of labourers receives a check. These results are not matter of vague conjecture, but are ascertained by figures: for example, it was found that, in Paris, during the period between 1743 and 1763, there were four years when wheat was 14 livres 18 sols for a certain measure, and during these four years the average annual mortality was 16,859; whereas, during four years in which wheat was 19 livres 1 sol for the same measure, or about a third dearer, the average annual number of deaths was 20,895. It is curious to think how the edicts of Mark Lane thus become only another kind of bills of mortality for the nation; but there can be no doubt that such is the case. Every shilling added to the price of the quarter of wheat, not compensated by an increased ability to get that shilling, numbers off an addition to the banquet of Death! If not by actual thinning of existing numbers, the check is given by the postponement of marriages. The natural rate is thus not a fixed or unvarying rate, but one determined in a great measure by the ideas and habits of the people.

The impossibility of a sudden or immediate result from either the increase or decrease of the supporting or wage fund, affects the question in an important manner. "If the supply of labour," says Mr McCulloch, "could be suddenly increased when wages rise, that rise would be of no advantage to the existing labourers. It would increase their numbers; but it would not enable them to mount in the scale of society, or to acquire a greater command over the necessities and conveniences of human life. And, on the other hand, if the supply of labourers could be suddenly diminished when wages fall, that fall would merely lessen their number, without having any tendency to degrade their habits, or to lower the condition of those that survived. But in the vast majority of instances, before a rise of wages can be counteracted by the increased number of labourers it may be supposed to be the means of bringing into the market, time is afforded for the formation of those new and improved tastes and habits, which are not the hasty product of a day, a month, or a year, but the late result of a long series of continuous impressions. After the labourers have once acquired these tastes, population will advance in a slower ratio, as compared with capital, than formerly; and the labourers will be disposed rather to defer the period of marriage, than, by entering on it prematurely, to depress their own condition and that of their children. But if the number of labourers cannot be suddenly increased when wages rise, neither can it be suddenly diminished when they fall: a fall of wages has therefore a precisely opposite effect, and is in most cases as injurious to the labourer as their rise is bene-

* Principles of Political Economy, second edition, 372.

fictal. In whatever way wages may be restored to their former level after they have fallen, whether it be by a decrease in the number of marriages, or an increase in the number of deaths, or both, it is never, except in exceedingly rare cases, suddenly effected. It must, generally speaking, require a considerable time before it can be brought about, and an extreme risk arises, in consequence, lest the tastes and habits of the labourers, and their opinion respecting what is necessary for their comfortable subsistence, should be lowered in the interim. When wages are considerably reduced, the poor are obliged to economise, or to submit to live on a smaller quantity of necessities and conveniences, and those, too, of an inferior species, than they had previously been accustomed to; and the danger is, that the coarse and scanty fare, which has thus been in the first instance forced on them by necessity, should in time become congenial from habit. Should this unfortunately be the case, the condition of the poor would be permanently depressed, and no principle would be left in operation that could raise wages to their former level, for the labourers could no longer have a motive to lessen the increase of population, as compared with that of capital; and unless they did this, it is quite impossible they could ever emerge from their depressed condition. Under the circumstances supposed, the cost of raising and supporting labourers would be really reduced; and it is by this cost that the natural or necessary rate of wages, to which the market-rate must generally be proportioned, is always regulated. In the event, for example, of a people who had been accustomed to live chiefly on wheat, being, from a scarcity of that grain, or a fall in the rate of wages, forced to have recourse to potatoes, and then, becoming satisfied with them, the standard of wages among such a people would be permanently reduced; and instead of being, as formerly, mainly determined by the price of wheat, it would, in time to come, be mainly determined by the price of potatoes. This lowering of the opinion of the labouring classes, with respect to the mode in which they ought to live, is perhaps the most serious of all the evils that can befall them. Let them become contented with a lower species of food, and an inferior standard of comfort, and they may bid an eternal adieu to every thing better. And it ought always to be borne in mind, that every reduction in the rate of real wages, which is not of a very transient description, will certainly have this effect, if its debasing influence be not counteracted by the intelligence, forethought, and consideration of the people, producing an increased prevalence of moral restraint, and a diminished supply of labourers."

If the theory of wages here described be the true one, and we believe no principle in political economy is considered as better established, we are enabled to discover very readily various things which exercise great influence over the well-being of the working classes. In the first place, it appears of the first consequence that those sentiments in the working classes themselves, which lead in the several cases to what is above described as the natural or necessary rate of wages, should not be lowered. Let the ideas of the working man as to what is a proper mode of living be kept high, and by irresistible consequence his mode of living will be high, for the number of labourers in the market will be moderate in comparison with the labour-paying fund. At the same time, it must be admitted that the increase of population has a tendency to stimulate ingenuity and exertion for the increase of the fund, so that, where ingenuity and activity exist as qualities of the people, and there is nothing to prevent these qualities from coming into play, the increase may go to a considerable length without lowering wages. This is, however, a much less certain principle, than that the natural tendency to increase of population far exceeds in force all tendency to increase of capital that has ever been exemplified on earth. In the most favourable circumstances, we know well that moral restraint is necessary—marriage itself is but a mode of moral restraint which mankind have in all ages found indispensable. Again, the greater the mental cultivation which any people experience, wages will be apt to rise or to keep high, for mental cultivation elicits qualities which tend to increase capital, at the same time that it implants moral feelings which tend to control the expansion of the population. Another point of immense consequence is, that the conduct of the people at large should be such as to allow capital the freest possible play. Every one has had experience of the natural fear and anxiety which attend the possession of however small a portion of wealth. Wherever there is danger, there wealth disappears. Wherever it cannot be employed in perfect security, and with profitable results, there it will not stay. The greatest natural advantages for its successful employment are in vain, where there is dispeace. We need only look to Ireland to see this

principle illustrated. It therefore becomes essential to the well-being of the working classes that the possessors of the fund out of which they are to be supported, should not have anything to fear, but that on the contrary the vigour of the government and the peacefulness of the people should be such as to inspire in those men the utmost possible confidence. It may be said that this is to ask a great deal from the labour class in behalf of the capital class; but it is just one of the results of human industry carried to a great and complicated extent, that a great number of human beings come into existence who depend for their support upon a thing which may vanish on the occurrence of any events calculated to give its owners uneasiness. The very charter of the being of these people is, accordingly, a conduct in all respects calculated to conciliate the confidence of capitalists. Finally, the freedom of all markets, including its own, is favourable to the interests of labour. It is true that a particular section of the community, or a particular trade, by surrounding itself with restrictions, may appear to obtain a higher share of the supporting fund than would otherwise fall to it. But the effect of all such restrictions is upon the whole injurious; and the general injury which they occasion, in the long-run tells upon the monopolists, so as to make them worse than they would have been, if there had been no restrictions.

SCENES AND STORIES OF VILLAGE LIFE.

BY MISS AGNES STRICKLAND.

WHITE-THORN FARM.

LUCY MARLOW was the eldest daughter of the wheelwright, whose neat workshops and well-stocked yard occupied an open space at the entrance of the village. There were seven in the family besides Lucy; but Isaac Marlow was a thriving mechanic, and his children constituted a part of his wealth, for his five sons assisted him in the various branches of his craft, which comprehended not only the construction of wheels, but every description of agricultural carriage, from a wheelbarrow up to a waggon. Isaac Marlow had lost his wife, but her place in the household department was well supplied by the active exertions of his daughter Lucy, who conducted the whole of the domestic affairs, assisted by a stout girl of fourteen, who had been apprenticed to her father from the workhouse. Polly Jones was an awkward uncivilised creature when she first arrived, for the children reared in workhouses are seldom instructed either in useful knowledge or decent behaviour, which is the reason why they are so often harshly treated by the persons to whom they are allotted. Such children are indeed deeply to be pitied, generally speaking; but little Polly fell into kind hands; and though at first she was very stupid, and broke many things from not having been accustomed to handle glass and crockeryware, Lucy, by the exercise of a little patience and forbearance, and some judicious encouragement, succeeded, in the course of a few months, in converting her young dependent into a valuable co-operator in her household labours, and in consequence gained time to educate her two little sisters. She also bestowed instruction in reading, writing, and sewing, on Polly, of an evening when she had finished her allotted tasks, and the morning business went on all the better for this indulgence. Polly soon became a brisk handy intelligent girl, and all the neighbours congratulated Lucy on her good luck in meeting with such a treasure, not considering the pains Lucy had taken to render her such.

Lucy was of a serene and cheerful temper, and the inward sunshine emanating from a mind at peace with itself, and the constant practice of virtuous though often laborious duties, gave brightness to her eyes, lightness to her step, and a sweetness of expression to her countenance, far more attractive than beauty. Lucy was, however, very prepossessing both in her manners and person, and her dress was always so exquisitely neat, that she was universally admired when seen, which was but seldom, beyond the precincts of the productive little garden that had been created partly by her own exertions on a slip of waste land between the dwelling-house and her father's yard. Seldom did any young farmer in want of a wife ride past on his way to Scrapeton corn-market, without pausing and thrusting his own, and of course his horse's, head and neck over Isaac Marlow's gate, as if to contemplate the merits of the carts, rollers, and gaily painted waggons, that were drawn forth in that yard to tempt the agricultural purchaser; but, truth to tell, more glances were directed towards the rows of cabbages, lettuces, or it might be the tall lilies and flaunting sun-flowers, that flourished in the trim garden in the background, where Lucy Marlow sometimes might be seen engaged in her horticultural pursuits, assisted by her little sisters Jane and Anne. But, notwithstanding these errant glances, Lucy had attained her twenty-third year without any other token of the

power of her charms, and it was the opinion of Lucy's five great brothers that Lucy would be an old maid; moreover, one of them had the incivility to tell her so.

"I hope it will be for the benefit of my family if I am," was Lucy's meek reply; "but, in truth, Hodge, I hardly know what my father and the little ones would do without me if I were to marry, of which, as you say, there is at present little chance," she added.

The fact was, Lucy had never given the slightest encouragement to those who were willing to attract her regard, because her heart had been secretly won by the silent but unmistakable attentions of a young man, who she feared would not be permitted by his friends to consult his affections in the choice of a wife; for Charles Rushmere was the eldest son of a man of sordid habits, who had amassed a considerable property by farming, and considered the increase of riches as the only duty in life.

Old Mr Rushmere lived in a distant parish, but had purchased a fine farm at Woodfield for Charles to employ himself in cultivating for their mutual profit. Charles Rushmere was a young man of excellent morals, benevolent, handsome, spirited and industrious, farmed in what was considered a good style, rode well, and was reckoned the agricultural Adonis of the village. All the damsels in his degree were disposed to set their caps at him, and their mothers said, "Poor Mr Charles Rushmere must lead a very dull life at White-thorn farm without any one to take care of him except old Sukey Scratchit, his housekeeper, and it would be quite a charity to ask him to tea in a friendly way now and then." So poor Mr Charles Rushmere was charitably invited to tea-drinkings in the parish, too numerous for us to record, and all the "young ladies," as per courtesy the daughters of the farmers and shopkeepers of Woodfield were called, did their best in turn to make impressions on the heart of the handsome heir of the rich old miser of Scrapeton Grange.

Between Michaelmas and Christmas, Mr Charles Rushmere had heard all the jingling piano-fortes, and assisted in turning over all the blue and pink and orange-coloured leaves of all the rival scrap-books in Woodfield, and stared at all the monstrous Cupids, pincushion-roses, lap-sided butterflies, and gaudy groups of oriental tinted flowers and bad prints they contained; also, he had with astonishing want of tact yielded obedience to sundry hypocritical entreaties not to read some halting rhymes to the honour and glory of the respective owners of these show-off volumes. When Christmas came, Mr Charles Rushmere was invited to a series of dances both public and private, at which he enjoyed the felicity of exhibiting his locomotive powers with every damsel in Woodfield successively, except the only one whom he considered worth a second thought, and that was the meek and modest Lucy Marlow. But Lucy never went to dances or gay tea-drinkings; her time was so fully occupied with the duties of her father's household, and the instruction of her young sisters, besides taking care of her brothers' linen, that she never had a moment to spare for other recreation than the cultivation of the garden, and sometimes a quiet walk in the meadows with her father, sisters, and her little maid, on Sunday evenings after church.

Charles Rushmere sat in the next pew to that which was occupied by the honest wheelwright and his family, and soon got into a similar habit of rambling in the meadows after they came out of church, "to help him to digest the sermon, and get an appetite for his tea," as he facetiously observed to Isaac Marlow, as if to account for this practice. The wheelwright, who had his eldest daughter, the pride and delight of his heart, on his arm, and had observed that their new neighbour's eyes had been often turned on her sweet face than on his Prayer-book during the service for many Sundays, had his own ideas on the motives of Charles Rushmere in joining them in their family walk; but the young man was so respectful and engaging in his manners, and confined his discourse so entirely to himself or the little girls during these rambles, that Isaac Marlow had no pretence for offering an objection to his company on such occasions. One evening, when they reached Marlow's gate, Charles Rushmere said, "I should consider it a great privilege if I were permitted to make one at your tea-table to-night, Miss Lucy."

Lucy looked down and replied, "that it was one of the rules of their family not to admit of Sunday visitors, because the evening of that day was devoted to the religious instruction of the children and the maid."

"Perhaps," observed Charles, with some degree of pique, "I should be equally unwelcome on any other evening!"

Lucy blushed and said, "that must depend on what her father thought."

"My good sir," said the wheelwright, "we are only members of what may be considered the working class, and you are the son of a rich man, one who is said to make some claim to the rank of a squire, and would probably consider us very much beneath you; therefore we must decline your company as a visitor at our humble board."

After this conversation, Charles Rushmere ceased to join the wheelwright and his family in their Sunday walks. He even went out of church by another door, and for three months looked at his book all prayer time, and at the parson during the sermon, instead of bestowing his devotions on his fair neighbour. Lucy began to think it would have been well if he had never

done otherwise, for she considered that Charles Rushmere ought to have respected both her father and herself the more for the motives which led them to decline his overtures; and so Charles did really, but, like many other lovers, he had any thing but an agreeable way of receiving a necessary repulse. Then he got angry and jealous on the score of the bachelor agriculturists whom he saw bestowing so much more attention on Isaac Marlow's carts and waggons than he considered at all requisite, and at last took the resolution of ordering one of those two-wheeled farming carriages yeleft in East-Anglian parlance a tumbrel, as an excuse for obtaining admittance into the domicile over which the wheelwright's pretty daughter was the presiding genius. Charles Rushmere chose a Saturday evening, after he had paid his people, as the time for this important transaction, partly in the hope that he might find Lucy alone, and partly with a half malicious intention of catching the young housekeeper in that state of confusion with regard to the domestic arrangements which in Suffolk is expressively called a *muddle*. But Lucretia herself, when her excellent housewifery was put to the test by the unexpected visit of her lord and his royal companions, appeared not to greater advantage spinning and carding among her maidens, than did the wheelwright's fair daughter sitting tranquilly by the bright fire and clean hearth of the freshly swept and garnished stone kitchen, in her neat brown merino dress and plain white collar, superintending and assisting in darning the hose of the males of the family with her sisters.

Any of the "young ladies" of Woodfield would have been ready to faint at the idea of being surprised at such vulgar employment. Lucy certainly blushed, and allowed her ball of blue-mottled yarn to roll from her lap to the other end of the kitchen, but her confusion proceeded from pleasure at the sight of the unexpected visitor, not shame at having been discovered in the performance of one of her duties. Charles instantly rescued the ball from the impertinent playfulness of a sony pet kitten that had just pounced upon it, and presented it to Lucy with the air of a Paladin.

"You find us very busy," said Lucy, as with a downcast glance she received this little act of attention; "but we always finish the week with our odd jobs."

"Lucy," said little Jane, "I do think Hodge always makes such a great hole in the toe of his stocking on purpose. I never can mend this."

"Then give it to me, dear, and run the thin place in the foot of Robert's sock. That is easy work for you," returned Lucy.

Charles cast an observing glance on Lucy's proceedings, and thought how differently Sukey Scratchit would have conducted herself, if he had presumed to wear holes in his stockings of such provoking magnitude for her Saturday evening's amusement.

"Hallo, Lucy! are you giving the young squire a lesson in darning stockings?" cried Isaac Marlow in surprise as he entered, on perceiving Charles Rushmere's curly head peeping over his daughter's shoulder, his lips pursed up, and his round blue eyes intently fixed on the process of crossing the villainous hole in the toe of Hodge's Sunday hose.

It was now Charles's turn to blush, and he did blush scarlet red as he stammered out, in a genuine Suffolk whine, "Mr Marlow, sir, I hope you will excuse me, but I have come to talk to you about a new tumbrel."

"Certainly," said Isaac Marlow, rubbing his hands, "that is a very excusable offence; but why did you not come to the workshop at once, where you were sure of finding me?"

It did not suit the young man to explain his reasons; so he said, "he could go and look in the workshop then, if it suited Mr Marlow."

"No," said Marlow, "we have shut up for the night, and to-morrow is Sunday; but I shall be very happy to receive your order, Master Charles, or mayhap I have a tumbrel in the yard that may suit you."

"I will come and talk further on the subject on Monday," said Charles, casting a glance of intelligence at Lucy.

"Then be pleased to come to me in the workshop or yard, if you do," returned the cautious father, who had detected the telegraphing between the lovers.

"It is not every farmer who enters this house who is willing to order a new tumbrel of you, Mr Marlow," rejoined the young man.

"Mine honoured customer, there is a time for all things, and a place too in my business for receiving orders, and that is the workshop, where I shall be very proud of waiting on you."

Charles was inwardly malcontent at Isaac Marlow's independent way of doing business with him, and half disposed not to give his order at all, especially as he was in no particular need of a new tumbrel, and he knew his father would consider such a purchase a great piece of extravagance. However, he recollected that it would afford him a very plausible pretext for loitering in the precincts of Lucy's dwelling, if he were not permitted to enter it. So, on the Monday morning, the order was given, and once a week at least he put on his smart green shooting-frock and bright-coloured leathers, and walked into the wheelwright's yard with the free and easy air of a person who had now a right to come there, and inquired "how they were getting on with his new tumbrel?" Marlow's sons thought this an exceedingly good joke; but the wheelwright shook his head, and replied at last, "not the better for your coming so often to trouble us

about it, Master Charles, and we are making all the haste we can to get it off the premises."

Charles considered this observation very uncivil, and in return caused as many artificial delays as he could, by commanding a variety of alterations, and changing his mind twice or thrice as to the colour he willed it to be painted, and all for the sake of standing opposite Lucy's window while he discussed these points, which were considered by Isaac Marlow as very blameable innovations in the orthodox plan of building tumbrels. All the farmers who were accustomed to look over Marlow's gate thought so too, and the fancies of young Charles Rushmere about his new tumbrel became at length the talk of the three adjoining parishes. In due course the report reached the ears of Mr Rushmere senior; and one bright morning, when Charles, regardless of Isaac Marlow's repeated intimations that his tumbrel had long been finished and ought to be removed, entered the yard with the intention of suggesting another alteration, he found his father standing before the said tumbrel, and surveying it with a sarcastic countenance.

"I have done myself the honour of coming from Scrapeton Grange this morning," said he, "to look at this precious article, which has afforded a theme for so many flattering remarks on the wisdom of my eldest son."

"I hope, sir, that it meets with your approbation," returned Charles, endeavouring to assume an air of nonchalance.

"No, sir, you don't hope any such thing; for you know me too well to suppose I can approve of such needless folly and extravagance," retorted the old man with an ireful glance; "and pray," continued he, "how do you think it is ever to be paid for?"

"I shall pay for it out of my share of the profits of White-thorn farm."

"Oh, you will, sir! Then let me tell you that if you turn my liberality to so poor an account, you shall have no farm to gain any profits from another year, but your brother Frank shall come to White-thorn farm, and you shall return home to take the labouring oar at Scrapeton Grange under my own eye."

"As you please, sir," said Charles.

"No, sir; it is not as I please; for Sukey Scratchit, whom I sent here to take care of you and your house, tells me that you are tired of her, and want to bring home a wife to White-thorn farm."

"She only tells you the truth, sir," rejoined the young man. "I have bestowed my affections on the prettiest, the most sensible, and the most industrious girl in the parish, and if you are the good father I have ever had reason to consider you, you will not oppose my wish to make Lucy Marlow my wife."

"Very fine talking, but I have not laboured all my life to gain wealth that you might throw yourself away on a beggarly wheelwright's girl," replied the elder Rushmere, and, taking Charles by the arm, he led him out of Marlow's yard. Charles could have wept with shame and mortification at the thought of such a scene taking place there—within hearing of Lucy's brothers, too! Fortunately Isaac Marlow was absent that day purchasing timber, or the taunts of the sordid rich man would not have passed unanswered. There was a cloud on his brow when he sat down to supper that night, for his sons had related the particulars of this annoying affair to him, as they had before done to Lucy. Lucy's eyes were swollen with weeping. Her pride and delicacy had been deeply wounded, and she feared she had incurred her father's displeasure; but she had no cause for apprehension. Isaac Marlow was a just man, and a kind parent, and when she came to kiss him before they parted for the night, he patted her cheek affectionately, and said, "Cheer up, my Lucy; you have been a good girl and a prudent one. No one has been to blame but Charles Rushmere, in playing such boys' tricks about that foolish tumbrel, and perhaps I was worse than he for taking his order. However, the tumbrel is a good one, and I shall dispose of it to another person, so that need not trouble old Rushmere."

The next day Isaac Marlow wrote word to Charles Rushmere, "that, as he understood his father disapproved of the order he had given him, he had sold the article to a fancy farmer from London, and hoped he would have no further uneasiness about it."

"I hope he may dispose of his girl to the fancy farmer from London as well as the tumbrel," was the elder Rushmere's obliging comment on honest Marlow's communication. Charles turned pale with vexation; for the fancy farmer, who was the son of a rich London mercer, and had recently turned an ancient farm-house into a modern Gothic cottage, with a Grecian portico, ornamented in the Egyptian style, had created a far greater sensation among the rural nymphs of Woodfield than ever Charles had done, and he feared he might prove a formidable rival in the heart of Lucy during his absence from the scene. The elder Mr Rushmere insisted on his giving up White-thorn farm for the present to his brother, and returning to the Grange. Mr Rushmere had cause to repent of this arrangement, for his son Frank, instead of bringing him either rent or profits from the farm, pursued a headlong career of dissipation as soon as he found himself in some degree his own master, formed an intimacy with the fancy farmer from London, ordered his clothes of a Bond Street tailor of his recommending, set his father and Sukey Scratchit at defiance, gave convivial parties at his bachelor abode, and, at the end of a couple of years, deeply involved himself in debt, and finished his career by breaking his neck at a steeple-chase,

which, as Sukey Scratchit consolingly observed to his father when she communicated the tragic event to him, "was the most sensible thing he had done since he came to live at White-thorn farm, and very convenient for his family just at that time, for if he had only lived another week, he was going to marry the sister of the fancy farmer's housekeeper, a very unworthy character as she understood; and then," pursued she, "all the money you have been scrubbing (Suffolk for scraping) together would have gone, you may guess where; for poor Master Charles aint likely to want it long, as I guess by the look of him; and so, as I say, it's all as it should be, and you will have plenty of time to look about you for an heir after poor Master Charles is dead and his funeral is over."

"Does the woman mean to drive me mad by telling me of the death of one of my boys and the funeral of the other in the same breath?" exclaimed the miserable rich man of Scrapeton Grange.

"Why, lauk, sir, don't put yourself out with me, pray, for I'm sure I meant no offence by just giving you a hint, now we are talking of the death of Master Frank, that you ought not to set your mind too much on his brother, for if you haven't noticed his horrid bad looks, and his tisking cough, all the three parishes have, and they all lay the blame on your shoulders, 'cause they say he is breaking his heart for the love of Lucy Marlow and the loss of White-thorn farm together, and you would have been a happier, and, more than that, a richer man, if you had let him have them both, say I."

"Why, you vile old pie-thank, whose fault was it that I ever heard a parcel of tales about my son Charles?"

"Your own, to be sure, sir, for lending an ear to a set of envious serpents who came to set you against your own flesh and blood."

"Were not you at the very head of ear-wiggling me, you deceitful old hag?"

"What, I, sir!—well, it is a fine thing to have some one to lay your evil deeds on. As true as I'm alive, I always said Master Charles was my favourite, and well he might be, for a nicer, quieter young fellow in a house, I never waited upon. Always home and in bed by ten o'clock; always up by five in the morning, and seeing after his men, and worked harder than any of them. We had no harum-scarum doings with him. He had set his mind on a proper good girl, and that was what kept him so steady, for he bore in mind king Solomon's proverb, 'a virtuous woman is a crown of glory to her husband's head.'"

The awful termination of Frank Rushmere's reckless career caused much excitement in the parish of Woodfield, but a more general sensation of sorrow was created by the pale and melancholy appearance of Charles Rushmere at his brother's funeral.

Lucy's brothers told her he was certainly in a deep decline, and Lucy, instead of sleeping, bathed her pillow in tears that night. The next day was a beautiful May morning; the sun shone brightly, the bees were humming gaily among the newly-opened flowers in Lucy's little garden, and the birds carolled forth their songs of joy in the white-blossomed cherry-trees and the old elms that overshadowed the dwelling; her young sisters were playing with their pet-lamb on the grass plot, and the kitten frisking round them. Every thing seemed cheerful and happy except poor Lucy.

"And now," said she to her father, after the rest of the family had gone out from breakfast, "it is worse for me than if I had permitted Charles Rushmere to court me."

"Not so, my Lucy, for you have obeyed your father, and your conscience is free from offence," replied Isaac Marlow. "Have patience, Lucy, and things may even yet work together for your good."

"Ah," said Lucy, "how is that to be, if Charles Rushmere dies?"

"He is worth many dead men yet," returned her father.

Lucy was glad to busy herself in putting away the breakfast things to conceal her tears. While she was thus occupied, her sisters came running in crying, "Oh, Lucy, Lucy, what do you think?—old Mr Rushmere has sent the drollest high-backed old green shay-cart you ever saw, to fetch you to Scrapeton Grange this morning."

"Has he sent it for me?" exclaimed Lucy, turning pale. "Are you sure of that, Anne?"

"Certainly; the old man who has come to drive you told us so, and begged that you would come as quickly as possible, for his master did not wish him to lose half a day's work if it could be helped."

"Father," said Lucy, "may I go?"

"Go, my child," replied her father, "if it is your wish."

Jane had already flown to fetch her sister's Sunday bonnet and shawl, and Lucy, who was always neat, tarried not to make any change in her household garb; but almost before Mr Rushmere's envoy thought she had been made acquainted with the nature of his errand, she came forth in readiness to obey the welcome summons. Jonas gave her an approving smile, and nodded to himself as she took her seat in the antiquated vehicle by his side; and as they jolted and rumbled together out of the yard, Polly Jones testified her lively sympathy and good-will towards her young mistress, by throwing an old shoe after her for luck. Lucy was half way on the road to Scrapeton before she could command her voice to ask old Jonas "how Mr Charles Rushmere was?"

"Lord love your heart, he'll do well enough now, I'll warrant him," was the cheering reply of the sagacious driver.

"Then he is not dying?"

"Oh, lauk, no, miss! nor half so bad as I was when I was crossed in love fifty years ago. I tell you what, miss, I have heard of some young women as have fretted themselves to death for sick like; but men ar'n't so tender-hearted: for, you see, miss, they has other things to occupy their time and thoughts. Not, miss, but what our young master have vexed *himself* good tidily about you, and so our master thinks, or else he would not have bundled me off so early this morning to fetch you. But our Sukey is partly to be thanked for that, for she put it into his head that Master Charles would have a *fever* or *information* of the heart with fretting so about you, miss. Master fared very queer, I promise you, when he heard that on the night after his other son's funeral too. 'So,' says he, 'there's a real physichin from London now at the Angel, what came to see old my Lord, and we'll hear what he thinks of Master Charles: run, Jonas, and tell him to step this way.' So I gived the doctor a bit of a hint as we came along; and when he had felt our young master's pulse, he looked wherry solemn, and shook his head. Says he, 'It is all in the heart, which have brought on alarming *simpkins* of another *natu*, for which I must write a *description*.' Then our master, when he had got the description made out, though he could not read one word of it, was forced to give doctor a golden guinea; for this was a real physichin wot was staying at the Angel, you know. Well, the *description* did our young master no good at all, as how should it! Then says old Sukey, says she, 'I can give you the best *description* for Master Charles after all, only you won't be ruled by me, sir, I s'pose.' 'But,' says master, 'Sukey, I *swear*, if you are sure it wot be too late.' Then says she to master again, 'While there's life there's hope, and to be sure you wot be a *Barbarous* Allen to your own son, now he's like to lie on his young deathbed!'

Master took her meaning, and told me to get out the old *shay*-cart, and brush it up a bit, which was only decent for me to do, for it had stood on one side in the cart-shed ever since our mistress's *funeral*, and the hens had got to roost along the high back of it, so that I had fine work to clean it up, as you may s'pose; and when I had got it a *little* tidy, and dusted the cushion, he ordered me to go and fetch you, Miss Lucy, the first thing in the morning."

Jonas had never in all his life met with an auditor who listened to his prising with the interest the lovely Lucy bestowed on this narrative.

When Lucy arrived at Scrapeton Grange, she felt some trepidation at the anticipation of an interview with the father of her lover, but Jonas, as if guessing her thoughts, said, "A pray, miss, don't go to frighten yourself about our master, for it aint at all likely you'll see him."

"How so?" demanded Lucy in surprise.

"Why, our master is a very queer old fellow, but I says nothing."

Mrs Sukey Scratchit now came forth in a clean starched muslin apron and high-crowned cap, to receive and welcome Lucy, and to act as mistress of the ceremonies in ushering her into the presence of her sick lover.

Charles Rushmore, when the weeping Lucy approached the old-fashioned settee on which his emaciated form reclined, drew her gently to him, and whispered,

"She came; his cold hand softly touch'd,
And bathed with many a tear;
Fast falling o'er the primrose pale
So morning dews appear."

"Ah, Charles, if you only knew how often I have cried over that ballad of late!" sobbed Lucy in the fullness of her heart.

"If you please, Miss Marlow," interrupted Mistress Sukey, putting her head in at the door, "master desires his compliments to you, and hopes you will excuse his dining at home to-day, if so be as you and Master Charles can make yourselves comfortable to dine together alone on roast fowl, with white bacon and egg sauce, and a bread pudding, at one o'clock."

"Mr Rushmore is very kind, I am sure," said Lucy.

"And remarkably considerate too," added Charles, with a smile. "Tell him we are greatly obliged to him, and shall be very comfortable without him."

"Lauk, Master Charles, he knows that well enough; and that is the reason he goes out to-day," rejoined Mistress Sukey.

My readers may imagine how swiftly and happily the hours fled away till six o'clock arrived, when Mistress Sukey again made her appearance to announce that the shay was at the door in readiness to convey Miss Lucy home.

A few days afterwards, Charles was sufficiently recovered to be able to ride over to Woodfield to return Lucy's visit, which his father intimated to him would be only a civil thing. At the end of a month, Charles was reinstated in the occupation of White-thorn farm; and a few days after, Mr Rushmore called at the wheelwright's house, where he found Lucy very busy kneading bread, while Polly was heating the oven. The old man condescended to commend Lucy's method of making up her loaves, asked for a mug of beer in order to ascertain her skill in brewing, gave a scrutinising glance at the general neat appearance of the kitchen, and then walked off to the workshop, where he abruptly informed

Isaac Marlow "that his business with him was to hear how soon it would suit him to spare his daughter to be his son's wife."

"If you ask me when it will suit me to spare my Lucy, I should say never," was the reply of the fond parent, "for she is my greatest comfort on earth; but as it is her happiness, not my own, I should think of, I suppose I must make up my mind to part with her as soon as one of her sisters is old enough to take her place."

"No, no, Mr Marlow; my son wants his wife home before harvest; and if he can't have her now, I shall make him take some one else (that is, if I can). But I had better send him to talk to you about it, for she seems the sort of girl to suit us."

That very day Charles came and pleaded his cause so movingly to the father of his Lucy, that Isaac Marlow consented to their immediate union.

Lucy was loth to leave her father with so young a housekeeper as Anne, who was scarcely twelve years old; "but, then," as she observed, "both Anne and Jane were very handy, and had learned many useful things of her, and Polly was now seventeen, and had got into nice neat ways, and she should herself be living near enough to come and help them on baking days, and any other times when they required assistance or advice."

So the matter was settled, and on midsummer day Anne and Jane officiated as bridesmaids to their happy sister, and Polly Jones, not the least delighted of the party, gained a new gown and a white ribbon from the bridegroom.

EFFECTS OF THE NATURAL FEATURES OF A COUNTRY UPON ITS PEOPLE.

This is a subject on which Werner used to delight his pupils. It is adverted to by Dr Wordsworth, in his very beautiful work, now appearing in numbers, entitled "Greece, Pictorial, Descriptive, and Historical." After pointing out the advantages of the climate, as producing "strength without stiffness, and softness without effeminacy," and the geographical position as favourable to intercourse with all other nations then civilised, Dr Wordsworth adds:—

"If we turn our eyes to the interior of the country, we are struck with the remarkable manner in which it is divided by the hand of nature into distinct provinces. The long ridges of mountains by which it is intersected in various directions, have traced upon its soil the lines of a natural map, which no hand of man will ever erase. Hence that distinction of tribes, differing from each other in extraction, dialect, and civil and religious institutions, with which the soil of Greece was peopled.

That the spirit of emulation and rivalry which naturally arose among these different tribes produced very important results, both for good and evil, it is not necessary to observe. While the cause of the nation, as a whole, suffered from the disunion consequent upon it, yet a love of glory and distinction was thus excited among the individual members of which the nation consisted, which led to no ignoble effects, either in arts or arms. The productions, too, of the poet and historian, gained life and vigour from the variety of dialects which were spoken by these different nations, and each of which was appropriated and consecrated, as it were, to the service of its own peculiar subject: and the political philosopher of Greece was enabled to confirm and illustrate his own speculations, by reference to the various forms of civil polity adopted by the numerous states among which his country was divided.

It would be long to inquire what facilities and encouragements were given to the cultivation of the arts by the physical properties which characterised the land of Greece. That the imaginative faculties of its inhabitants were awakened and kept alive by the remarkable phenomena which presented themselves to their view, cannot be doubted.

The volcanic fires which agitated its soil, the earthquakes which overthrew the walls of its cities, and convulsed the inmost recesses of its hills, the lakes whose inundations engulfed its plains, the rivers which forced their way by subterranean chasms through the barriers of rocky hills—to omit all reference to the majestic forms of nature in repose which daily met his eye, namely, a sky without clouds, a sea studded with numerous islands, and a land clad with thick forests—and not to mention the creations of *art* which so happily adorned these *natural* objects as to seem to be united and identified with them, as, for instance, the stately mass and the well-marched columns of the Doric temple rising on the hill, or the breathing statue in the grove—all these objects were to the imagination of the Greek like so many trophies of Miltiades to the mind of Themistocles; they haunted him like a passion by day, and disturbed his sleep by night; they carried him away from the region of blank abstractions, and from the contemplation of mere objects of sense, to dwell in the presence of living Powers, by whom, in his creed, all the motions of the universe were impelled and controlled.

* This is a cheap publication in the department of art. Its half-crown numbers are each illustrated by three first-rate steel engravings, and some thirty wood-cuts, done in that style of minute fidelity and exquisite finish which is at present bringing this mode of multiplying pictures into so high a place in British art. Of the descriptive literary matter the portion as yet published is too limited to allow us to form a correct judgment of its merits.

To descend from contemplating the conceptions of genius, to consider the mechanical operations of art: It was to the geological formation of its mountains, to the durable limestone rock of which they consist, that Greece was indebted for those magnificent works of military architecture—for the massy wall and lofty tower of polygonal masonry by which she defended the cities which still stand upon her hills, and which seem to rival, in permanence and strength, the mountains themselves from which their materials were hewn.

Again, it is to the rich and varied veins of marble, which streamed, in exhaustless abundance, through the quarries of Paros, of Pentelicon, of Hymettus, and of Carystus, that she owed the noblest works of her sculptors and her architects—her Parthenons and her Theasums, her friezes of Phigaleia and of Egina.

And as it was the wealth of her soil to which she was indebted for the existence of these beautiful creations, so it was the purity of her air which preserved them: this latter element allowed her to attract the popular eye, to inform the national taste, to inspire the faith, and evoke the gratitude of her sons, by the statues and pictures of her gods and her heroes, of her good and great men, which she placed, not only beneath roofs or within walls, but merely in the enclosures of her halls and of her fane, but on the lofty pediments of her temples, in the open spaces of her agoras, at the doors of her houses, and in the crowded avenues of her streets.

This permitted her also to decorate her buildings with the brilliant and varied hues which painting lent to her sister-art, and to imitate the clearness of her own sky, and the freshness of her own sea, by those architectural embellishments which art would not venture to adopt, except in a country alone where nature has eclipsed in brightness and vivacity of execution every thing that art can conceive."

ACCOUNT OF THE INVENTION OF THE NEW KIND OF CANDLES.

THE following account of the invention of the new kind of candles lately mentioned in the Journal, has been forwarded to us from Leeds by an individual subscribing himself "A Young Chemist," a pupil of the inventor. We give it as it has been received by us, without pledging ourselves as to its perfect accuracy:—

Artificial wax, as this substance may be called, was discovered by M. E. Chevreul, a distinguished French chemist, and member of the Institute, when a very young man, and was one of the many important results of an examination into the nature of oils and fats (*Recherches sur les Corps Gras*). This examination was undertaken with a view to explain the real nature of saponification, or the conversion of oils into soap by alkalies—a subject which had long puzzled chemists, who were, consequently, unable to aid the soap-maker to improve or economise his processes. They had long known that acids combine with alkalies, and neutralise their properties; but it could never be asserted that the combination of alkali and oil could be an example of the same law, when oil had none of the properties of an acid.

The subject was full of difficulties when M. Chevreul undertook its investigation. The substances to be examined were of a most complex nature; our information on organic chemistry was most meagre; while analysis, as applied to vegetable and animal compounds, could hardly be said to have existed. His enthusiasm and perseverance overcame every difficulty. Notwithstanding that many experimenters have followed the same path, with all the advantages of improved methods and apparatus, scarcely any new facts have been discovered, and no errors found. Indeed, his work has been cited by the celebrated Berzelius, the first chemist of the day, as the most perfect model of experimental inquiry with which the history of chemistry presents us. He found oils and fats to be composed of two substances: one solid, which he called stearine, from the fact that tallow is composed almost exclusively of it; the other liquid, existing in large quantity in oils, and hence named by him oleine. He ascertained that the oil does not combine directly with the alkali, but that its two components are converted by it into two corresponding acids, the stearic and oleic, which then combine with the alkali, like the mineral acids. He found, indeed, the analogy perfect between them in every respect. They unite with all the bases, forming compounds which differ in the degree of their solubility; with potash, for instance, a very soluble compound is formed (soft soap); with soda, hard soap, which is dissolved with more difficulty; while its combination with lime gives rise to a perfectly insoluble compound. These facts have been most important to the soap-maker in enabling him to reduce his art to scientific principles; they explain why a solution of soap may be used as a test for the purity of water; why rain water is preferred to that from the spring for washing; and why we add soda to hard water before using it with soap, for soda separates the lime which the hard water contains, and thus enables us to dissolve the soap without producing the curdy precipitate which destroys the cleansing properties of the soap.

M. Chevreul separated these acids from their compounds, and found them possessed of the following properties:—Oleic acid is a liquid, clear when pure, and closely resembling oil; stearic acid is solid, and resembles wax in so striking a manner as to be with difficulty distinguished from it. On finding he could manufacture it at a price much inferior to that at which wax is sold, he, in conjunction with M. Gay-Lussac,

another distinguished chemist, took out a "brevet d'invention" for the preparation and sale of "chandelles steariques," from which they never derived any benefit, solely on account of the name, which, merely implying candles prepared from tallow, attracted no attention; whereas manufacturers, who took up the trade after the expiration of the patent, and who announced, with less regard to truth, their productions as "bougies," or wax candles, speedily made large fortunes; a proof, and many more of the same kind might be adduced, that those were wrong who asked, depreciatingly, "what's in a name?" Does the reader wish to prepare and examine this artificial wax himself? Nothing is more easy. He has only to dissolve a little hard white soap in hot rain or distilled water, and to the clear solution, while hot, add some vinegar, or other acid. The stearic being a weak acid, is easily separated from its combination with soda, as it exists in soap. Acetate of soda is formed, and the stearic acid rises to the top of the liquid as an oily substance, which, on cooling, solidifies into a cake of artificial wax, mixed with a certain portion of oleic and impurities, which render it softer than if this fluid had been expelled by pressure. A similar process is pursued on a large scale, but regard must be had for economy. The tallow is saponified, not by soda or potash, as in the preparation of soap, but by quick-lime. It is only necessary to boil the lime, tallow, and water, in a large vessel for some hours, when these ingredients are converted into a kind of hard soap. From this substance, stearate and oleate of lime, also the stearic and oleic acids, are separated by the addition of oil of vitriol. They are melted like tallow, run into cakes, and subjected to the press, which separates all impurities, and leaves the stearic acid as pure and white as the finest bleached wax, which may be used immediately for the formation of candles. In France, besides plaiting the wicks, they are dipped in a solution of borax, and then dried. The borax fuses during the combustion, and, forming a globe on the summit of the wick, assists by its weight to bring it out of the flame in contact with the atmosphere, and thus insures perfect combustion, and obviates the necessity of snuffing.

It was found that the artificial wax generally crystallised in the moulds, a circumstance which prevents the formation of a solid candle. In England this difficulty was overcome in some cases by the addition of arsenic. The French, more scientific than we, had recourse to their knowledge of the laws of crystallisation for the remedy. It is known that regular crystallisation only takes place when the transition of the mass from a fluid to a solid state is so gradual as to allow time for its molecules to arrange themselves in those determinate forms called crystals: this condition was fulfilled in the cooling of the moulds and their contents, but by plunging them in cold water as soon as the melted stearic acid had been poured in, crystallisation was prevented, and a perfectly solid candle procured. No arsenic, as far as I am aware, is now used in the manufacture of the candles in England.

MR BUXTON'S NEW WORK ON THE SLAVE-TRADE.*

THE first purpose of this volume is to show that the slave-trade, while really abolished in the British dominions, and professedly so in some others, is, upon the whole, carried on to a greater extent, and is more-over productive of a much greater amount of human misery, now than at any former period. A second object of the author is to prepare the public mind for a new and effectual means of putting down the trade.

With regard to the extent to which the trade is carried on, Mr Buxton presents a series of quotations from public papers, showing that into Brazil, in the year ending June 30, 1830, the number of slaves imported was 78,331, besides an unknown, but presumably large number who were smuggled. Since then, notwithstanding a treaty entered into on the subject, the number imported into Brazil is allowed on all hands to have greatly increased. Mr Buxton, nevertheless, sets down the number imported into Brazil as only 78,331. He then shows data which make it probable that the number imported into Cuba is not less than 60,000. These, united to other numbers for slaves intercepted or destroyed on the voyage, and to 50,000 for those carried to Mohammedan states, give 200,000 as the annual amount of human beings sent out by Africa as slaves—a number which, from many circumstances, appears considerably below the truth, though documentary evidence will not allow of a higher one being assumed.

Mr Buxton then proceeds to show that, after all, this statement of numbers affords but an inadequate idea of the extent of evil produced by the slave-trade. In the first place, the obtaining of slaves in Africa is the cause of tremendous internal wars, productive, like all wars, of great mortality, as well as repressive of all social improvement. The strong assault and capture the weak; often, in order to obtain young persons, the whole of the remainder of a little nation, men, women, and children, are massacred: the face of the country is covered with desolation. The compensation for

these evils consists in ardent spirits, tawdry silk dresses, and paltry necklaces of beads. Denham, the African traveller, says that on one occasion twenty thousand negroes were killed for sixteen thousand carried away as slaves. On the march to the coast, the captured wretches experience dreadful cruelties, and die in great numbers. It has been calculated by M. Mendez, the author of a learned treatise on the mortality of negro slaves, that five-twelfths or nearly a half of those captured die before reaching the coast.

The section respecting the seizure of the people for slaves, is the most interesting in the book; it comprehends the details given by Park, Clapperton, Lander, and other African travellers, besides many derived from the reports of missionaries and other individuals to the African Society. The following, which may serve for a specimen of all, and which refers to the slave-capturing expeditions of the troops of the Pacha of Egypt, is translated from a recent French work, the composition of Count De Laborde, to whom the information was communicated by a French officer who went to Cairo in 1828, and resided for ten years in the country of Mohammed Ali.

"M. — there (in Egypt) learnt that four expeditions, called *gaswahs*, annually set out from Obeid, the capital of Kordofan, towards the south, to the mountains inhabited by the Nubas negroes. The manner and object of their departure are thus described: One day he heard a great noise; the whole village appeared in confusion; the cavalry were mounted, and the infantry discharging their guns in the air, and increasing the uproar with their still more noisy hurrahs. M. —, on inquiring the cause of the rejoicing, was exultingly told by a follower of the troop, 'It is the *gaswah*.' The *gaswah*! for what—*gazzelles*! 'Yes, *gazzelles*; here are the nets, ropes, and chains; they are to be brought home alive.' On the return of the expedition, all the people went out, singing and dancing, to meet the hunters. M. — went out also, wishing to join in the rejoicing. He told Count Laborde he never could forget the scene presented to his eyes. What did he see? What gain did these intrepid hunters, after twenty days of toil, drag after them? Men in chains; old men carried on litters, because unable to walk; the wounded dragging their weakened limbs with pain, and a multitude of children following their mothers, who carried the younger ones in their arms. Fifteen hundred negroes, corded, naked, and wretched, escorted by 400 soldiers in full array! This was the *gaswah*; these the poor *gazzelles* taken in the desert. He himself afterwards accompanied one of these *gaswahs*. The expedition consisted of 400 Egyptian soldiers, 100 Bedouin cavalry, and twelve village chiefs, with peasants carrying provisions. On arriving at their destination, which they generally contrive to do before dawn, the cavalry wheel round the mountain, and by a skilful movement form themselves into a semicircle on one side, whilst the infantry enclose it on the other. The negroes, whose sleep is so profound that they seldom have time to provide for their safety, are thus completely entrapped. At sunrise the troops commence operations by opening a fire on the mountain with musketry and cannon; immediately the heads of the wretched mountaineers may be seen in all directions, among the rocks and trees, as they gradually retreat, dragging after them the young and infirm. Four detachments, armed with bayonets, are then dispatched up the mountain in pursuit of the fugitives, whilst a continual fire is kept up from the musketry and cannon below, which are loaded only with powder, as their object is rather to dismay than to murder the inhabitants. The more courageous natives, however, make a stand by the mouths of the caves, dug for security against their enemies. They throw their long poisoned javelins, covering themselves with their shields, while their wives and children stand by them and encourage them with their voices; but when the head of the family is killed, they surrender without a murmur. When struck by a ball, the negro, ignorant of the nature of the wound, may generally be seen rubbing it with earth till he falls through loss of blood. The less courageous fly with their families to the caves, whence the hunters expel them by firing pepper into the hole. The negroes, almost blinded and suffocated, run into the snares previously prepared, and are put in irons. If after the firing no one makes his appearance, the hunters conclude that the mothers have killed their children, and the husbands their wives and themselves. When the negroes are taken, their strong attachment to their families and lands is apparent. They refuse to stir, some clinging to the trees with all their strength, while others embrace their wives and children so closely, that it is necessary to separate them with the sword; or they are bound to a horse, and are dragged over brambles and rocks until they reach the foot of the mountain, bruised, bloody, and disfigured. If they still continue obstinate, they are put to death.

Each detachment, having captured its share of the spoil, returns to the main body, and is succeeded by others, until the mountain, '*de battue en battue*,' is depopulated. If from the strength of the position, or the obstinacy of the resistance, the first assault is unsuccessful, the general adopts the inhuman expedient of reducing them by thirst; this is easily effected by encamping above the springs at the foot of the mountain, and thus cutting off their only supply of water. The miserable negroes often endure this siege for a week, and may be seen gnawing the bark of trees to extract a little moisture, till at length they are com-

pelled to exchange their country, liberty, and families, for a drop of water. They every day approach nearer, and retreat on seeing the soldiers, until the temptation of the water shown them becomes too strong to be resisted. At length they submit to have the manacles fastened on their hands, and a heavy fork suspended to their necks, which they are obliged to lift at every step. The march from the Nuba mountains to Obeid is short. From thence they are sent to Cairo. There the pacha distributes them as he thinks proper; the aged, infirm, and wounded, are given to the Bedouins, who are the most merciless of masters, and exact their due of hard labour with a severity proportioned to the probable short duration of the lives of their unhappy victims.

At Obeid alone, 6000 human beings are annually dragged into slavery, and that at the cost of 2000 more, who are killed in the capture. The king of Darfur also imports for sale yearly 8000 or 9000 slaves, a fourth of whom usually die during the fatigues of a forced march: they are compelled, by the scarcity of provisions, to hurry forward with all speed. In vain the exhausted wretches supplicate for one day's rest; they have no alternative but to push on, or be left behind a prey to the hungry jackals and hyenas. 'On one occasion,' says the narrator, 'when, a few days after the march of a caravan, I rapidly crossed the same desert, mounted on a fleet dromedary, I found my way by the newly-mangled human carcases, and by them I was guided to the nightly halt.'

The above are old-established evils: what follows is new. When the slave-trade was not forbidden, the vessels employed to carry the slaves from Africa to the colonies, not being under any fear of confiscation, were built on a principle of capacity, and the ordinary allowance of room was comparatively liberal. British vessels, of 150 tons and under, were not allowed to carry more than five men to every three tons. Now, from the danger of seizure, slave-vessels are built on a principle of quick sailing, and the space allowed for the slaves is much less than it was. They are strung upon a chain, of which each is allowed only one quarter of a yard, and lie between the decks almost as closely packed as herrings in barrels, the only posture being on one of their sides. The disgusting filth and misery, the sickness and mortality, which result from these arrangements, are dreadful. Formerly, one fourth was calculated to be the amount of loss of life on the voyage; now, a slaver considers himself well off if he saves a third of those embarked, and fortunate if he retains a half. And often, when chased, these gentlemen scruple not to lighten the vessel by throwing a number of the slaves overboard: instances have even occurred, and that at no distant date, of their throwing over the whole; a measure to which they are tempted to have recourse by a law which makes it impossible for a cruiser to seize them if they have no slaves on board.

Mr Buxton also makes calculations of the mortality which occurs amongst the captives while waiting to commence the voyage, and of that which takes place while they are getting "seasoned" for labour on the plantations. Even when rescued by British cruisers, he shows that the poor wretches are still liable to great misery and a high rate of mortality. In his summary, he comes to the conclusion that the loss of life in the seizure, march, detention on the coast, the voyage, and in seasoning, amounts in all to 145 per cent. In other words, out of every 245 slaves carried away from Africa, 145 die or are killed before reaching the place of their final destination. The total annual loss to Africa he makes out to be not much less than half a million; and he adds, "Even this is but a part of the total evil. The great evil is, that the slave-trade exhibits itself in Africa as a barrier, excluding every thing which can soften, or enlighten, or civilise, or elevate the people of that vast continent. The slave-trade suppresses all other trade, creates endless insecurity, kindles perpetual war, banishes commerce, knowledge, social improvement, and, above all, Christianity, from one quarter of the globe, and from 100,000,000 of mankind."

The amount of slaves imported into various colonies and countries when Wilberforce and Clarkson commenced their labours, was only about 70,000, or at the most 80,000, instead of being, as now, 200,000. "Millions of money, and multitudes of lives," says Mr Buxton, "have been sacrificed, and, in return for all, we have only the afflicting conviction that the slave-trade is as far as ever from being suppressed." * * Hitherto we have effected no other change than a change in the flag under which the trade is carried on; or, it may be added, a change in the place of destination; that is, instead of being carried to the British West Indies, the slaves are now taken to Cuba or South America. The French and Spanish flags have been used in succession; and now the greater part of the trade is carried on under the flag of Portugal, which sells the privilege at a fixed rate. An universal combination to put down the trade is not, Mr Buxton thinks, to be hoped for; and even if such a measure were to be effected—even were the trade to be every where treated as piracy, he believes that the deportation of slaves would still be carried on, in consequence of the irresistible temptation which its profits hold out to private enterprise. It is an axiom at the custom-house that no illicit trade can be suppressed if the profits exceed 30 per cent. Now, the profits of the slave-trade are many times 30 per cent. Mr Buxton states an instance, taken up apparently at random, in which 180 per cent. of profit was realised. We fully believe that this is an effectual reason why the slave-

* Murray, London. 8vo. Pp. 240.

trade cannot be put down. While all men are extremely reluctant to meet certain death, some are never wanting who will readily enter into enterprises involving almost any amount of risk of that calamity.

The new plan for extinguishing the trade proposed by Mr Buxton, has reference, not to civilised mercantile powers, but to Africa itself. He is of opinion that the trade would cease, if the native chiefs could be convinced that a more profitable trade would arise if this were put down. He enters into statements showing the immense capabilities of Africa as a productive country, above what we have ever had any experience of, and shows that the quarter million of British exports now sent to it is but a trifle compared with what, in fair circumstances, it ought to take. With respect to the means requisite for impressing the African chiefs with a sense of the superior advantages of a more convenient trade, he does not consider himself at liberty to unfold them in the present volume, as they are now under the consideration of the government, but he promises fully to develop them in a subsequent publication. We must confess that we do not well see how a task so great and difficult as that suggested by Mr Buxton is to be set about, but every one must be quite willing to listen to the scheme, and give it their best consideration when it is placed before them. Meanwhile, Mr Buxton has presented to Humanity the startling fact that all her efforts of the last fifty years to diminish the miseries arising from slavery, have been defeated by Cupidity, and that hundreds of thousands of human beings are still the annual victims of that detestable traffic.

SKETCHES IN NATURAL HISTORY.

THE SILK-WORM.

THIS little creature, whose labours are of such incalculable value to mankind, is supposed to have been indigenous to China. In that country, at least, the discovery was first made, that the product of the silk-worm's operations could be elaborated into articles of human attire, richer and more beautiful than any to be derived from other sources. At an early period a considerable commerce was established in silk between eastern and western Asia, from which latter quarter it was conveyed to Europe; but not until the sixth century of the Christian era, was it distinctly known by Europeans that the splendid tissues which they had worn for more than a thousand years, and which they had even partially manufactured from the raw transported material, were the product originally of a worm. The first silk-worms seen in Europe were brought from China in the year 552, by two Persian monks, who had gone thither as Christian missionaries, and who contrived to secrete a number of the silk-worms' eggs in a cane, and to escape with them to Constantinople. From these few eggs have sprung all the successive generations of silk-worms which have supplied silk to Europe from that period to the present time.

The valuable insect whose history has been thus briefly detailed, receives from naturalists the appellation of *bombyx*. It is of the caterpillar tribe, and, like its congeners, passes through a number of transformations in the course of its existence. Its first state is that of the larva or caterpillar, which it enters into on leaving the egg; its second state is that of the pupa or *chrysalis*; and its third state is that of the imago or moth. The silk-worm moth is of considerable size, and is of a greyish colour. The female moth deposits its eggs on the mulberry tree, the leaves of which, as will be afterwards explained, form the sole subsistence of the silk-worm. This deposit, when the creatures are not under artificial management, is made about the middle of summer, and the eggs of one moth usually amount in number to three or four hundred. They are about the size of mustard-seeds, and at first yellow in colour, but afterwards assume a bluish-grey cast. Being fastened by a sort of glue to the spot, the egg of the silk-worm retains its position in spite of wind and rain, until the period for the hatching of the young caterpillar. After autumn and winter are past, the egg opens in May, and the worm which issues is about a quarter of an inch in length, thin in body, and of a blackish tint. It soon shows a desire for food, and begins to feed on the mulberry leaves, though without exhibiting any inclination to roam from the spot where it first came to life. For eight days it continues to feed with avidity, and increases to nearly twice its original magnitude. At the end of the time mentioned, it falls into what is called its first sickness, and leaves off eating for three days, when it casts its first skin. This moulting is repeated four times, at regular intervals, before the worm attains the complete caterpillar state, which commonly takes place about a month after the hatching of the worm. The reason of these successive moultings is to be sought for in the rapid growth of the worm, which increases

its bulk many thousand fold during these changes. The original skin, when once become hardened, could scarcely have been distended at a rate sufficient to accommodate the augmenting size of the creature, and therefore a number of coverings have been provided in embryo to obviate the difficulty. The plan which the worm takes to get out of its skin, is to fasten the latter to the leaf by a sort of silky glue, which holds it fast, until the inmate rubs its head against the leaf, breaks off the scales, and finally drags through its whole body.

Ten days after its fourth moulting, the worm attains its complete caterpillar state, and is then about two and a half inches long, with twelve parallel and equidistant membranous rings round its green body, and sixteen legs arranged in pairs, of which the five posterior ones are moveable, and the three anterior pairs scaly and unmoveable, serving seemingly for supports only. The caterpillar has fourteen eyes, seven on each side of the head, and along the body are eighteen holes for the creature's breathing; each hole being connected with some kind of respiratory organ. The mouth is placed vertically, and the jaws are indented like the teeth of a saw. Immediately beneath the mouth are two small holes, placed close to each other, and through which proceeds the silk which the creature spins. These holes are connected with two bags or tubes in the interior of the body, in which is secreted the yellow gummy substance which constitutes the silk. These tubes or bags are of great length in comparison with the animal's body, being each about ten inches long. They are wound round a portion of the intestines as on a spindle, and do not communicate directly with the external holes, but by means of a sort of grater, pierced with many openings, through which the silk-gum is drawn out in many filaments, to be united as they issue by the external aperture into one thread.

Having fed itself, during the ten days subsequent to the last moulting, up to the full size, the caterpillar, constituted as we have described, begins to feel the stimulus of nature urging it to the next change of its condition, which is necessary to bring it to the moth or butterfly state, and which is accompanied with operations most beneficial to the human race. The caterpillar seeks a corner or angular spot in which to begin its spinning. Having settled this point, it weaves a number of irregular threads around the place, to be a support to its future tenement. The mode in which it does this is by fixing a portion of the gum or silk on a certain point, and then by receding from the spot, or turning its head and body, draws out the thread by the two holes already alluded to. Separate filaments issue from these apertures, but the animal is provided with a hook at the edge of its mouth, with which it unites them into one. In one day the caterpillar, proceeding with its work, weaves a pretty thick layer of loose silk, called the floss silk, in the oval interior of which the creature of course remains. For the whole of the succeeding three or four days, it is occupied in spinning the cocoon, or solid ball of silk, which is man's valuable prize. This cocoon is seldom above three grains in weight, yet, when unrolled, the filaments composing it are sometimes found to be more than a mile long! This shows the wonderful celerity with which the caterpillar must emit the material during its three days' operations. It takes the quickest way of working, and that most easy for itself, spinning the thread not in regular circles, which would demand an extensive motion of the body, but in short wavy lines from point to point. The whole cocoon is usually less in size than a pigeon's egg, and is of a yellow hue. Having effected this great work, and shut itself up within a strong and firm covering, the caterpillar, much decreased in bulk by this extensive and uncompensated excretion, prepares for its final change. It throws off its last caterpillar case within a few days after the completion of the cocoon, and assumes the chrysalis form. It is now an oblong, soft, brownish body, without limbs, apparently, or power of motion. Its members, however, exist in embryo, and in about twenty days they develop themselves fully, and the chrysalis becomes a perfect moth or butterfly. By the use of its hooked feet, and its head, it then separates the filament of the cocoon and makes its way into light and life, the winged creature of an hour, seeming to have little other purpose in its existence but to seek a mate, that new eggs may be produced for the continuation of the race. This it does immediately on coming to light.

The product of the silk-worm's labours, such as they have now been described, was a thing of too much value and importance not to attract the attention of man to the means of improving and increasing the fruit of the insect's operations. The Chinese, the first discoverers of the value of the silk-worm, have long pursued artificial modes of ensuring the regularity of the silk produce. In Europe, also, and in many other parts of the world, for the last thousand years, the rearing of the silk-worm has been the object of the most anxious and unremitting attention. It has been stated that these insects feed on mulberry leaves alone: the culture of the mulberry tree, therefore, is an essential preliminary to the artificial rearing of silk-worms, and on this account a few words may first be devoted to the point. The mulberry, or *morus*, in botanical language, is well known as producing a fruit much in use in European countries. There are several varieties of the tree, distinguished by the colour of the fruit they produce, one yielding a black fruit, a second a white fruit, and a third a red fruit. There

are two or three other species, but the white, which appears to have come originally from China, is considered by far the best food for silk-worms, although most of the other varieties have been found also to sustain them. The white-fruited mulberry, therefore, which bears broad, smooth, and pointed green leaves, has been most extensively planted in those parts of Europe where the silk-worms are habitually reared. The tree may be easily raised, either by cuttings, layers, or by seed, and that in any warm or temperate and regular climate. Its leaves cannot be used without injury to the tree before the fifth year, when they usually appear in great plenty in the beginning of May. Mulberry trees have often two crops of leaves in the year, and indeed, in very warm climates, the tree produces fresh leaves all the year round, thus permitting the artificial breeders of worms to obtain several crops of silk in a year. Old trees afford the best leaves, but in France and Italy the mulberry plantations are usually allowed to attain a size most inconvenient for the plucking of the leaves, which might be prevented by proper cutting of the trees. Pruning always improves the quality of the leaves, about thirty pounds of which may be procured from a healthy well-grown tree. As might be supposed, many experiments have been tried, by engrafting and other means, to improve the mulberry; and one fact, at least, has been ascertained, that the process of engrafting, under all circumstances, does good.

Having an ample provision, in expectancy, of mulberry leaves, the silk-worm itself is the next object of care. The attention required in the management of these insects is indeed great and incessant. If the eggs, for example, from which the brood of the season is expected, be hatched a few days too soon, by a slight mismanagement of temperature, the whole hopes of the cultivator will be ruined. His leaves and his worms must be ready for one another to an hour almost. The eggs of silk-worms are a marketable article, and experienced men can tell good from bad ones, as easily as merchants can determine the quality of mustard seeds. It is by confinement of the moths to particular spots that the eggs are procured, the insect being necessitated by situation to deposit them on paper or on cloths. They are then gathered, and placed in such situations as may prevent them from being hatched until the mulberry leaves are ready. It has been found that one of the best ways of effecting this object is to place the eggs in sealed glass vessels, kept continually immersed in cold water. When the proper season for bringing on the hatching arrives, the eggs are taken out of the phials, and separated from one another by washing. It is common, also, to use a little wine in order to free them of the gum which adheres to them, and which renders the shell more difficult for the worm to break. The eggs, previously dried, are then taken to the stove-room, where they are exposed to a gradually increasing temperature, until they grow white, which is the signal of the approaching outbreak of the worm. Muslin is now laid over the eggs, and above this muslin a quantity of mulberry leaves. As soon as the worms are hatched, they crawl through the muslin, and attach themselves to the leaves. In one or two days, all the healthy worms will be out of their shells.

The feeding-room is the place to which the worms are now conveyed. This apartment should be dry and well ventilated, but at the same time closed against the access of ordinary insects. It should contain proper shelves, also, for the reception of the worms. Young and tender leaves are given to the worms at first. Through the whole period of their transmutations, their food is chopped small, a great saving of leaves being thus effected. They are fed regularly three or four times a-day, and consume, during the period of their moultings, a quantity of food which would appear wonderful, did not one remember the vast increase which takes place in their bulk. The same number of worms which will be satisfied with one pound of leaves previous to their first moulting, will consume one hundred and eighty-three pounds during their last feeding interval, before the commencement of their spinning. For their convenient performance of the latter operation, bushes of broom or brushwood are erected on the shelves, being usually bent over in an arched form. In corners of these bushes, the worms arrange themselves, and there they go through the process of manufacturing their cocoons. In three days their labour is finished, and in a few days afterwards the cocoons are carefully gathered from the bushes. One-sixtieth part of them is set aside for breeding, and the remainder are exposed to a strong heat, in order to extinguish the vitality of the chrysalis within, previous to reeling off the silk. In separating the breeding portion, care is taken to select partly males and partly females, the cocoons of the former being known by being pointed a little at the ends. When the moth breaks out, care is taken to make it deposit its eggs where they can be gathered, and laid aside for the next season. The moth soon dies, having fulfilled its object—no mean one—in creation. It seldom lives two days, taking the while no food that can be observed.

It has been stated that one cocoon sometimes yields filaments a mile in length. More commonly, however, six hundred yards is about the extent of the largest cocoons. Twelve pounds of cocoons yield one pound of silk, by the ordinary computation. The silk differs considerably in quality, and the cultivators sort the cocoons, accordingly, into distinct lots, being guided by the observation of colour and other circumstances. When brought to the market, these various kinds are

readily known by the purchasers, and bring prices proportionate to their value.

The rearing of silk-worms, conducted in a manner more or less resembling that now detailed, has long flourished in various parts of Europe, but never, for any length of time, has it succeeded in our own country. James I. endeavoured to naturalise the silk-worm in England, but after a time the attempt was given up. Various trials of the same kind have been since made, both publicly and privately, but without attaining to any permanent success. It would appear, upon the whole, that our climate is too cold, or at least too variable, for this branch of industry, both as regards trees and worms. In France the rearing of silk-worms is an important pursuit to the people of the southern departments. Of late years great advances have been made there in the production of raw silk. In the year 1812, France produced 987,000 pounds weight of raw silk; in 1828, the produce has been estimated at 2,700,000 pounds weight; in consequence of which great increase, the country is not necessitated to import one-tenth of foreign silk, where it used to import one-half, for its internal consumption and the employment of its looms. In Italy, Sicily, and Turkey, considerable quantities of raw silk are produced from the worms. From all the countries mentioned, England procures the raw material, either by fair trade or smuggling; but her chief supplies come from her East Indian possessions, from China, and from other oriental countries. Feeling still the want of more extensive supplies, English enterprise has been the means of recently introducing the mulberry tree into the islands of Malta and St Helena, and there are strong hopes that ere long a large addition of raw silk may be thrown into British hands from these quarters. At present, the people of the United States seem to have become keenly alive to the advantages of rearing the silk-worm within their own territories, and thus finding home-silk for their home-consumption. They have already succeeded to a considerable extent, and undoubtedly, with the variety of climate at their command, they may push this branch of industry to any point they choose.

Since this little creature's produce has become truly a necessary of life, these matters are not unimportant to British comfort and commerce, and, for the same reason, we hope that these details about the history of the silk-worm will not have proved uninteresting to the readers of the Journal.

SECOND MARRIAGE OF THE FATHER OF PETER THE GREAT.

THE Czar Alexei Michailovitch, father of Peter the Great, was so much attached to the nobleman Artemin Matfeof, that, contrary to the etiquette of the Russian court, which forbids the czar to visit a subject, he would often go to his house in a friendly and familiar way. One evening, coming in unexpectedly, and seeing the table set for supper with great neatness, he said to Matfeof, "The table seems so neatly and prettily covered, I feel a strong desire to sit down to it with you. Yes, I will follow the suggestions of my appetite, and place myself at table by thee, upon this condition, however, that I disturb nobody, and that none get up from table till they have supped." "Whatever your majesty pleases and commands must be to the honour of my house," returned Matfeof. The supper was served up, and the czar sat down to table. The mistress of the house enters, with their only son, and a young lady, who, after making their profoundest reverences, obey the czar's commands, and take their places at the table. During the supper, the czar looked frequently round upon the little company, and seemed to take particular notice of the young lady that sat over against him, as not recollecting that he had ever seen her before as one of Matfeof's children. "I always thought," said his majesty, "that thou hadst no other child than that boy, but now I see, for the first time, that thou hast a daughter likewise: how earnest thou never to mention her to me?"

"Your majesty thought perfectly right," answered Matfeof: "I have but that one son. But the young lady that sits opposite is the daughter of my friend and relation, the nobleman Kyrilla Narishkin, who lives in the country on his estate, whom my wife has taken into the house, to show her the city, and, in God's good time, to get her well provided for."

The czar said nothing more, than that "he had done a good deed, which therefore must be agreeable to God." After supper, when Matfeof's family were risen from table, and gone to their own apartment, the czar chose to continue sitting with his host. His majesty resumed the subject of the young lady, Natalia Kyrilovna, and said, "The maiden has a handsome appearance; she seems to have a good heart, and is not too young to be married. Thou must endeavour to get her a fit husband." "Yes," answered Matfeof; "your majesty judges rightly of her: she possesses an excellent understanding, with the greatest modesty, and the best of hearts. My wife, and the whole family, are uncommonly fond of her, and consider her as if she were our darling daughter. But as to a suitor for her, that is what we are not soon likely to expect. She has indeed numberless good qualities, but little or no wealth; and if I should meet with an opportunity to settle her, the portion I could afford her out of my narrow fortune would be but small." The czar upon this replied, "She must find a sweetheart that has so much property himself as to stand in need of nothing from her, but

consider her good qualities as the greatest and best of portions, and make it his endeavour to render her happy." "That is just what I could wish," said Matfeof; "but where shall I find such a lover, who looks more for excellent qualities in his bride than for a splendid fortune?" "Oh, yes," said the czar, "they are still to be found very frequently: do thou think occasionally thereupon, and I myself will likewise look out for some such match. The maiden is deserving of all the pains we can take to make her happy." Matfeof thanked his majesty for so gracious an intimation of his kindness, and there the matter remained. The czar wished him a good night, and took himself away. A few days afterwards his majesty came again to Matfeof, discoursed with him for a couple of hours on state affairs, and, after getting up, seemingly with a design to take leave and go away, on a sudden took his chair, and sat down afresh. "Now, tell me," said he to Matfeof, "hast thou not forgot our late conversation about providing a lover for Natalia Kyrilovna?"

"No, most gracious sir," answered Matfeof; "I bear it continually in mind, and only wish it were to some effect. I have found nothing suitable for her yet, and I much doubt that a proper offer will soon be made; for though a number of our young noblemen come to visit me, and consequently often see my charming foster daughter, they none of them give any intimations about marriage."

"Well," said the czar, "perhaps it may not be necessary. I told thee that I would myself use some endeavours to provide a bridegroom for her. I have had the good fortune to find one, with whom she will probably be very contented and happy. I know the man: he is an honourable and worthy person, has merit, and wealth enough not to be under the necessity of asking an estate or portion with her. He loves her, and will marry and make her happy. Thou knowest him too, though probably he hath hitherto not discovered his intention to marry. I think, likewise, that when he applies to thee, thou wilt not give him a denial." Matfeof here interrupted the czar, by saying, "As I just told your majesty, that would be a most desirable thing; it would free me from a great concern I have continually at heart about this poor girl. Dare I now beseech your majesty to tell me the man's name?" Perhaps I know him likewise, and can inform your majesty something of his circumstances."

"I have told thee that I know the man," returned the czar; "that he is a worthy honest fellow, and capable of rendering his wife happy: this thou mayest take my word for. I can say no more of him, till we know whether Natalia Kyrilovna will be willing to have him."

"There is no doubt of that," returned Matfeof, "when she hears that your majesty has provided her a spouse. In the meantime, she must know who the person is, that she may give her answer. This, I think, is but reasonable."

"Well, then," said the czar, "I give thee to know that I myself am the man that hath resolved to marry her, if she be inclined to it. Do thou tell her this, and ask her whether she can approve of me."

At this unexpected declaration of the czar, Matfeof was filled with astonishment, threw himself at his feet, and said, "I beseech your majesty, for the love of heaven, that you will change your resolution, or at least that you will not order me to acquaint the young lady with it. Most gracious sovereign, you know full well that I have already a great many enemies at court, and among the principal families of the empire, who are jealous of the favour and confidence your majesty is pleased to allow me. What an outcry will there be among them when they find your majesty has preferred a marriage with a poor maiden of my family to a connection with one of the principal ladies at court! Doubtless their hatred and malice against me will cover all the land; and every one will think that I have abused your majesty's favour, and unworthily contrived to bring about the match, for the sake of raising myself still higher in your majesty's regard, and for elevating my family to a connection with that of the czar's."

"All that will nothing signify," replied the czar: "the affair is mine, and thou hast no business with it. My resolution is taken, and thereby I shall remain."

"Well, be it according to your majesty's pleasure," said Matfeof; "and may God bless your majesty with every kind of prosperity! Since it is to be so, let me beg only one favour for myself and for Natalia Kyrilovna, which is, that your majesty will proceed in the matter according to the custom of the empire, and with as little noise as possible, by ordering a number of the marriageable young ladies of the principal families, and among them Natalia Kyrilovna, to appear together at court, with the design of choosing one of them for a bride; and, in the meantime, that no person besides your majesty and myself, not even Natalia Kyrilovna, have the slightest intimation of your purpose and resolution."

The czar found this procedure highly proper, and accordingly bade Matfeof be prepared for the event, and to discover his intention to no one. A few weeks afterwards, he declared his design of marrying again to the heads of the church and his chief ministers in a private council, and further told them that on such a court day all the marriageable daughters of the chief nobles were to be commanded to appear at court, that his majesty might consider them, and choose a bride.

This was accordingly done on a certain day in September 1670, in the Kremlin palace at Moscow, when sixty noble ladies presented themselves in their most

superb attire, and among them Natalia Kyrilovna Narishkina in neat and pretty apparel. They were all sumptuously entertained by the czar; but Natalia was declared to be the monarch's bride.—*Gentleman's Magazine*, 1789.

BILLARD'S ADVENTURE IN A WELL.

THE story of the unfortunate Dufavel, who was buried accidentally in a well, and remained in it for a long period [see Journal, No. 259], is not without a parallel in the history of mining transactions in France. In the department of the Indre, and parish of Fleure-la-Riviere, March 27, 1837, about half-past eight in the morning, Etienne Billard, a working mason, descended a well one hundred and twenty feet deep, for the purpose of examining it preparatory to some repairs. When he had reached the bottom, or nearly so, an extensive portion of the sides fell in upon him, and shut him out from the light of day; but, by a remarkable piece of good fortune, the materials, in falling, formed a small arch of about three feet in diameter around his head. Had it not been for this, he would have been either fatally hurt by the heavy stones of the masonry, or would have been suffocated immediately. Every other part of the well around his body was filled compactly with the fallen materials. The noise of the irruption was heard by some workmen near the spot, who immediately ran up to it. On listening intently, they heard the cries of Billard, and the certainty that he was yet alive inspired the hope of delivering him. Sending off one of their number to alarm the neighbouring inhabitants and authorities, these workmen then lowered a lighted candle down the well, the danger of a further fall of the sides deterring themselves from going down. The candle went down one hundred feet, thus showing that about twenty feet of the mass, or a considerable portion thereof, lay above the unfortunate Billard. In reply to their call, he was heard distinctly to say that he could not see any thing of the light. "I am assured," he moreover said, "that I am a lost man. But I suffer no pain, and I breathe freely."

No ordinary difficulty, it was obvious, stood in the way of relief in this case. For workmen to descend into the narrow deep well, and attempt to clear away the ruins, without some security against a further fall of the sides, was a dangerous task. The authorities of the district, as soon as they arrived, and saw the nature of the accident, sent off an express for the district superintendent of roads and bridges, Monsieur Certain. He was at some distance, and did not arrive till next day. In the mean time, one man, a slater, ventured to descend to the top of the fallen mass of stones and earth, which proved, as had been shown by the candle, to be about one hundred feet below the orifice. Urged by the indistinct cries for help which they heard from poor Billard, the men on the spot began to lift the stones forming the sides of the well. When Monsieur Certain arrived, he descended without hesitation into the well, and put several questions to Billard respecting his situation. M. Certain judged it proper to continue the raising of the sides of the well, as the displacement of the lower part would render it most imprudent to go on otherwise. No side boring could be executed with such speed as the whole well could be cleared. The soil, fortunately, was clayey and firm. While this labour was going on day and night, with the utmost rapidity compatible with a proper degree of caution, friends and fellow workmen of Billard descended occasionally to animate him with the cheering sound of kindly voices, and with the assurance that help was near.

On the morning of the 29th, the governor and head engineer of the department of the Indre arrived. M. Ferrand, inspector of works, was with them, and descended into the well. He gave his assent to the continuation of the operations going on, which some of the anxious friends of the prisoner were beginning to exclaim against, from their seeming slowness. In presence of the gentlemen mentioned, the labours were continued, and on the evening of the 29th the well was clear to the upper part of the fallen mass. Without delay, the process of lifting them was begun; but from the size of the stones, the work went on very tardily, through the difficulty of hoisting them to such a distance above. After they had advanced a certain way, a new difficulty met them in the face. It was impossible to tell the exact state of the arch formed so miraculously over the head of the unfortunate man, or its degree of stability. It was necessary, therefore, to go on with the elevation of the stones with extreme care and delicacy, otherwise the unsettlement of any portion of the heavy masses above him might have caused his instantaneous death, either from a crush or suffocation.

At ten o'clock in the evening of the 29th, the workmen were calculated to be about six feet above the captive, who had now been shut out from the light since the morning of the 27th. It was impossible to send him food by a bore as in the case of Dufavel, and he had therefore the pressure of hunger added to his misery. His voice was heard more clearly as the workmen went on, and they could now even tell the exact point where he was confined. But during the night of the 29th his voice became a source of fear and alarm to the labourers above him. Billard's motionless condition, his want of food and air for so long a time, began to overthrow his moral courage. His reason gave place to delirium, his hope to despair. The

workmen heard him at one moment lamenting his fate and piteously crying for food, and at the next moment they heard him abandoning himself to the most extravagant gaiety. Laughter heard in such a situation was a thing almost too deplorable and shocking for human ears to listen to. When consulted on the meaning of these symptoms on the part of Billard, M. Nabert, a surgeon who had never quitted the spot since the time of the accident, recommended the workmen to hurry on their labours, as the man could probably survive but a few hours in this state.

In consequence of this advice, a new direction was given to the work, and in place of passing down by the side of the spot where the poor man was supposed to be, the excavation was carried slopingly down to his head. In fine, after three days and three nights of incessant toil, the head of Billard was reached, and cleared of all surrounding matter. The instant that this took place, it was notified to those above by a cry, and the deafening shouts that were immediately raised, showed what an assemblage had gathered around the place to learn the issue of the case. The deliverance took place exactly a quarter of an hour before eleven o'clock in the morning of the 30th. When raised once more to the daylight, every precaution was taken to prevent any bad effects from a change so sudden. He was carried to a neighbouring house, with his body and head well wrapped up, and there he was laid in an apartment, from which the light was in a great measure excluded. After some spoonfuls of light broth and a little wine had been administered to him, he fell immediately asleep, never having tasted that blessing during his confinement. Before sleeping, he had spoken in such a way as to show that his mind had recovered its tone. His pulse was weak but quick, beating 126 times in a minute; his skin was cold, his thirst burning, and his tongue stuck almost to the roof of his mouth. While confined, he had eaten a portion of the leather front of his cap or bonnet, and he had even, he said, endeavoured to grind with his teeth a stone that lay before him.

Etienne Billard soon recovered. His imprisonment had not been so protracted as to render the vital heat difficult of restoration. His body, however, though not mangled or bruised, as it might have been expected to be, retained for a long time a feeling of dull pain, from the pressure that had been exerted upon it.

ENGLISHMAN ASCENDING VESUVIUS.

THE Countess of Blessington, in her recent work, "The Idler in Italy," remarks that the travelling English make the worst appearance abroad of all nations, on account of the large portion of uneducated men whom wealth allows, amongst us, to quit their country for a season. The traces of this in continental albums are, she says, very conspicuous. The following is a grotesque picture presented by her ladyship of a fellow-countryman whom she found toiling up the slopes of Vesuvius. Supposing it to be an account of a real person actually seen, it supplies an apt illustration of the philosophy of a late article entitled, "Business and Leisure:"—

"A most piteous sight was presented to us by the ascent of a very fat elderly Englishman, who commenced this painful operation at the same time that we did. He was, like me, preceded by a guide with leathern straps, to which he adhered with such vigorous tenacity, as frequently to pull down the unfortunate man, who complained loudly. The lava, gravel, and cinders, put in motion by the feet of his conductor, rolling on those of the fat gentleman, extorted from him sundry reproaches, to which, however, the Italian was wholly insensible, not understanding a word of English. The rubicund face of our countryman was now become of so dark a crimson, as to convey the idea of no slight danger from an attack of apoplexy; and it was bathed in a profuse perspiration, which fell in large drops on his protuberant stomach. Being afraid to let go the leathern straps for even an instant, he was in a pitiable dilemma how to get at his pocket handkerchief. One of our party offered to take out his pocket handkerchief, seeing how much he stood in need of it; an offer which he thankfully accepted, but explained that his pocket was secured by buckles on the inside, to prevent his being robbed; a precaution, he added, that he well knew the necessity of, as those Lazarettos (Lazaretti he meant) would not otherwise leave a single article in it. It required no little portion of ingenuity to separate the pocket inside; and while the operation was performing, he kept praying that his purse, snuff-box, or silver flask, might not be displayed, lest they might tempt the Lazarettos to make away with him, in order to obtain those valuables.

"I took care to conceal my watch," said he with a significant look, "for I know these rascals of Lazarettos right well. Why, would you believe it, ladies and gentlemen? they pretty nearly knocked me down in that dirty village where the donkeys are hired. I was up to their tricks, however, and saw, with half an eye, that when they pretended to fight among themselves, it was a mere sham, as an excuse that I might get an unlucky blow between them, when, I warrant me, they would soon have dispatched me, and have divided my property amongst them, but they saw your large party coming, and that saved me."

I asked why, if his opinion of the Neapolitans was so bad, he ventured alone with them on so hazardous an expedition. "Indeed, ma'am, I never had such a foolish intention; for, would you believe it, I have come to that there dirty village no less than three times, in the hope of meeting a large party of English who might serve as a protection for me, but until to-day never saw more than one or two persons, therefore I returned as I came. I had heard, however, so much of this burning mountain,

that I was determined to look on with my own eyes; for I am one of those who don't believe every thing I hear, I can tell you, and more especially about places in foreign parts. In truth, ma'am, I just wanted to be able to say when I got home, 'Why, good people, I've been on the spot, and am up to the whole thing.'"

NATURE.

[BY R. C. WATERSTON.]

I love thee, Nature—love thee well—
In sunny nook and twilight dell,
Where birds and bees and blossoms dwell,
And leaves and flowers;
And winds in low sweet voices tell
Of happy hours.

I love thy clear and running streams,
Which mildly flash with silver gleams,
Or darkly lie, like shadow dreams,
To bless the sight;

While every wave with beauty teems,
And smiles delight.

I love thy forest, deep and lone,
Where twilight shades are ever thrown,
And murmuring winds, with solemn tone,
Go slowly by,
Sending a peal like ocean moans,
Along the sky.

I love to watch at close of day,
The heavens in splendour melt away,
From radiant gold to silver grey,
As sinks the sun;

While stars upon their trackless way,
Come one by one.

I love, I know not which the best,
The little wood-bird in its nest,
The wave that mirrors in its breast
The landscape true,

Or the sweet flower by winds caressed,
And bathed in dew.

They all are to my bosom dear,
They all God's messengers appear!
Preludes to songs that spirits hear!
Mute prophecies!

Faint types of a resplendent sphere
Beyond the skies!

The clouds—the mist—the sunny air—
All that is beautiful and fair,
Beneath, around, and everywhere,
Were sent in love,
And some eternal truth declare
From heaven above!

—New York Mirror.

MISERIES OF AMERICAN NEWSPAPER PROPRIETORS.

[The serio-comic complaints of editors and publishers of newspapers, that their subscribers fail to pay for their papers, seem to form a standard topic among our transatlantic brethren of the press. The following are two specimens of this kind of lachrymose drolletry.]

A SINGULAR ADVENTURE.

Once upon a time a traveller stepped into a post-coach. He was a young man, just starting in life. He found six passengers about him, all of them grey-headed, and extremely aged men. The youngest appeared to have seen at least eighty winters. Our young traveller was struck with the singularly mild and happy aspect which distinguished his fellow-passengers, and determined to ascertain the secret of long life, and the art of making old age comfortable. He first addressed the one who was apparently the oldest, who said that he had always led a regular and abstemious life, eating vegetables and drinking water. The young man was rather daunted at this, inasmuch as he liked the good things of this life. He addressed the second, who astonished him by saying he had eaten roast beef and gone to bed regularly drunk for seventy years—adding, that all depended on regularity. The third had prolonged his days by never seeking or accepting office; the fourth by resolutely abstaining from political or religious controversies; and the fifth by going to bed at sunset and rising at dawn. The sixth was apparently much younger than the other five; his hair was less grey, and there was more of it—a placid smile, denoting a perfectly upright conscience, mantled his face, and his voice was jocular and strong. They were all surprised to learn that he was by ten years the oldest man in the coach. "How!" exclaimed our young traveller, "how is it you have thus preserved the freshness of life?—where there is one wrinkle on your brow, there are fifteen on that of each of your juniors—tell me, I pray, your secret of long life?" "It is no mystery," said the old man; "I have drunk water and wine; I have eaten meat, and have eaten vegetables; I have held a public office; I have dabbled in politics, and have written religious pamphlets; I have sometimes gone to bed at sunset, and sometimes at midnight; got up at sunrise, and at noon; but—I always paid promptly for my newspapers."

DELINQUENT SUBSCRIBERS.

The Mobile Mercantile Advertiser has changed proprietors. Mr Smith, the former conductor of the journal, thus concludes his farewell remarks to his readers. There is more truth than poetry in what he says. Hear him, and let those to whom his remarks apply consider their conduct. We have a few such patrons as those of Mr Smith among the readers of the Mirror—we are sorry to say—but we hope their number will decrease every week. They are the incubus that paralyse exertion and depress the literature of the land. But to the extract—

"Of all trades, professions, or callings, I know of none—I have followed a great many—so poorly paid as publishers of newspapers. All patrons of newspapers, otherwise worthy, punctual men, think it not unrighteous to let the publisher wait year after year for his dues—

and at last, if he is compelled to pay, he does it with a very bad grace. 'Mr Type must have his money, must he?' Well, if he must, he must. Give me a receipt; and, do you hear, stop the paper! I have patronised that establishment six years—there is no such thing as gratitude in the world.' Another will tell you he never subscribed for the paper; 'the boy has left it every morning, it is true, and as it was left, I did read it occasionally—but I never ordered it.' There is another class of patrons, who never subscribe at all, but are great friends of the paper, and always read it—in fact, this is the class who may be termed 'your constant readers.' 'Here, Sam, go over the way, with my compliments to Mr Tompkins, and ask him for the loan of his paper; and, Sam, tell him, as he never reads it before breakfast, I'll thank him to let John bring it over here every morning—it is an excellent paper—that editor really knows what he is about—I begin to think of patronising him myself.' There yet remains to be mentioned one more class of patrons—supporters, I should say—for they are the support and stay of publishers. This class is composed of those who say, 'Here, Mr Clerk, be so good as to place my name on your subscription list, and write opposite to it PAID IN ADVANCE.' In looking over a list of some thousands yesterday, I saw a hundred or two of this class. If I had any golden types, their names should literally appear in letters of gold. There are now from twelve to fifteen thousand dollars due this office; and I am convinced the new proprietors would willingly sell all the debts for five thousand! It is thus with all newspapers—and why? because publishers are good-natured, and submit to their own degradation in the scale of tradesmen. Let this state of things be amended—reform it altogether! Adhere strictly to the terms of your papers—sur, take the word of an experienced man, you had better keep your ink and paper than furnish them and your labour for nothing. You may get popularity, but you will get no pork and cabbage for your dinner."

Delinquent subscriber—if you be an honest man, send us the amount you owe us.—ED. N. Y. MII.

REMOVAL.

I have such horror of moving, that I would not take a benefice from the king, if I were not indulged with non-residence. What a dislocation of comfort is comprised in that word—moving! Such a heap of little nasty things, after you think all is got into the cart; old dregging boxes, worn-out brushes, gallipots, vials, things that it is impossible the most necessitous person can ever want, but which the women, who preside on these occasions, will not leave behind if it were to save your life; they'd keep the cart ten minutes to stow in dirty pipes and broken matches, to show their economy. Then you can find nothing you want for many days after you get into your new lodgings. You must comb your hair with your fingers, wash your hands without soap—go about in dirty gaiters. Were I Diogenes, I would not move out of a kilderkin into a hoghead, though the first had nothing but small beer in it, and the second reeked claret.—Lamb.

CAPACITY FOR HAPPINESS.

Happiness consists in the multiplicity of agreeable consciousness. A peasant has not a capacity for having equal happiness with a philosopher: they may be equally satisfied, but not equally happy. A small drinking-glass and a large one may be equally full, but the larger one holds more than the small one.—Johnson.

ATTACK UPON A LION.

Passing the following morning, Richardson and myself were suddenly made aware of the monster's presence by perceiving a pair of gooseberry eyes glaring upon us from beneath a shady bush; and instantly, upon reining up our horses, the grim savage bolted out with a roar like thunder, and bounded across the plain with the agility of a greyhound. The luxurious beauty of his shaggy black mane, which almost swept the ground, tempted us, contrary to established rule, to give him battle, with the design of obtaining possession of his spoils; and he no sooner found himself hotly pursued, than he faced about, and stood at bay in a mimosa grove, measuring the strength of his assailants with a port the most noble and imposing. Disliking our appearance, however, and not relishing the smell of gunpowder, he soon abandoned the grove, and took up his position on the summit of an adjacent stony hill, the base of which being thickly clothed with thorn trees, we could only obtain a view of him from the distance of three hundred yards. Crouched on this fortified pinnacle, like the sculptured figure at the entrance of a nobleman's park, the enemy disdainfully surveyed us for several minutes, daring us to approach with an air of conscious power and pride, which well becometh his grizzled form. As the rifle-balls struck the ground nearer and nearer at each discharge, his wrath, as indicated by his glistening eyes, increased roar, and impatient switching of the tail, was clearly getting the mastery over his prudence. Presently a shot broke his leg. Down he came upon the other three, with reckless impetuosity, his tail straight out and whirling on its axis, his mane bristling on end, and his eyeballs flailing rage and vengeance. Unable, however, to overtake our horses, he shortly retreated under a heavy fire, limping and discomfited, to his stronghold. Again we bombarded him, and, again exasperated, he rushed into the plain with headlong fury, the blood now streaming from his open jaws, and dyeing his mane with crimson. It was a gallant charge, but it was to be his last. A well-directed shot arresting him in full career, he pitched with violence upon his skull, and throwing a complete somersault, subsided amid a cloud of dust.—Harris.

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